



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/785,391	02/24/2004	Raymond Bass	INDUCTION2-CONT	6526
2574	7590	11/24/2006	EXAMINER	
JENNER & BLOCK, LLP ONE IBM PLAZA CHICAGO, IL 60611			LEUNG, PHILIP H	
			ART UNIT	PAPER NUMBER
			3742	

DATE MAILED: 11/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

MAILED

NOV 24 2006

Group 3700

Application Number: 10/785,391
Filing Date: February 24, 2004
Appellant(s): BASS, RAYMOND

Li-Chung Daniel Ho
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 9-8-2006 appealing from the Office action
mailed 1-10-2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5,660,753	LINGNAU	8-1997
5,837,976	LOVELESS et al	11-1998

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-3 and 5-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lingnau (US 5,660,753), in view of Loveless et al (US 5,837,976).

Lingnau discloses the claimed invention of an induction heating stripping device for removing coating bonded to a metal surface including an electrical power supply 14, electrical leads 22 and stripping head 20. It does not explicitly show the circuit of the power supply with the use of capacitors (see Figures 1, 2 and 4 and col. 2, line 38 - col. 5, line 45). However, Loveless shows that it is well known in the art of induction heating devices that it is essential to use capacitors to form a resonance circuit with the heating inductor to induce current to the work load to provide induction heating. It shows the use of a capacitor 92, 94 between each lead to the power supply 86 and each lead to the inductor 96 forming series resonant circuits. The

capacitors 92 and 94 are clearly spaced from the inverter 86 by the transformer 88 and the lead wires and definitely the commercial power source (see Figures 4B, 5 and 8 and col. 4, line 66 – col. 5, line 65). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lingnau to include capacitors in order to form a series resonant tank circuit with the heating inductor to produce induction heating at resonance for better heating efficiency and result, in view of the teaching of Loveless. In regard to claim 6, Lingnau uses a 75-100 KW, 10 KHz frequency and 480 volts (see the abstract and col. 4, lines 1-6). The use of a lower wattage power supply for smaller jobs in order to lower cost would have been an obvious choice. In regard to claim 7, the exact value of the capacitors would be a matter of engineering design depending on the values of the operating frequency and the inductance of the induction heating coil (84, 96) in order to form a resonance circuit according to the formula (see Loveless, col. 5, lines 35-43). In regard to claims 8-10, the length of the cables would have been a matter of engineering expediency depending on the overall load characteristics and the available cost. Although the length of the cables 22 in Lingnau has not been disclosed, it would be obvious to an ordinary artisan the cable length would depend on the relative distance between the job site and the power supply. More importantly, since there is no criticality or reason on why and how such parameters are chosen provided in the specification, therefore, they are only seen as an operating example that can be easily determined by an ordinary artisan through routine experimentation.

(10) Response to Argument

Applicant's arguments filed 10-26-2005 have been fully considered but they are not persuasive. The argument that Loveless (US 5,837,976) does not disclose capacitors "spaced from the power supply" is not well taken. At the outset, all that is required is "an electrical power supply" without any specifics on the power supply. It is submitted that "an electrical power supply" may be merely the commercial power source which of course, is spaced from all the electrical devices using the power source. Furthermore, even if the capacitors 92, 94 and the voltage inverter 86 (commonly known as the claimed power supply) as shown in Figure 4b are in a single housing, they are still spaced and separated from each other by the transformer 88 and the wires. In regard to claims 8-10, the appellant has not provided any reason or criticality in the specification or the argument for the use of the claimed cable lengths and the length ratio (25%). It is therefore, respectfully submitted that it is a mere matter of engineering expediency to determine the relative location of the electrical elements between the power supply and the other electrical elements depending on the types of heating application.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,


Philip H. Leung
Primary Examiner
Group Art Unit 3742

Conferees:

Robin Evans

Janet Baxter




P.Leung/pl

11-20-2006